

## Supplementary Material

**Table S1:** Test Data: annotation of NLQ to ontology classes in the PMR

#	Query	Phrases	Annotation
1	sodium	sodium	<a href="http://purl.obolibrary.org/obo/CHEBI_29101">http://purl.obolibrary.org/obo/CHEBI_29101</a>
2	chloride	chloride	<a href="http://purl.obolibrary.org/obo/CHEBI_17996">http://purl.obolibrary.org/obo/CHEBI_17996</a>
3	hydron	hydron	<a href="http://purl.obolibrary.org/obo/CHEBI_15378">http://purl.obolibrary.org/obo/CHEBI_15378</a>
4	basolateral membrane	basolateral membrane	<a href="http://purl.obolibrary.org/obo/FMA_84669">http://purl.obolibrary.org/obo/FMA_84669</a>
5	apical plasma membrane	apical plasma membrane	<a href="http://purl.obolibrary.org/obo/FMA_84666">http://purl.obolibrary.org/obo/FMA_84666</a>
6	Portion of renal filtrate	portion of renal filtrate	<a href="http://purl.obolibrary.org/obo/FMA_280587">http://purl.obolibrary.org/obo/FMA_280587</a>
7	Collecting duct of renal tubule	collecting duct of renal tubule	<a href="http://purl.obolibrary.org/obo/FMA_15628">http://purl.obolibrary.org/obo/FMA_15628</a>
8	Epithelial cell of proximal tubule	epithelial cell of proximal tubule	<a href="http://purl.obolibrary.org/obo/FMA_70973">http://purl.obolibrary.org/obo/FMA_70973</a>
9	sodium/glucose cotransporter 1 (rat)	sodium/glucose cotransporter 1 (rat)	<a href="http://purl.obolibrary.org/obo/PR_P53790">http://purl.obolibrary.org/obo/PR_P53790</a>
10	give me model containing glucose transporter	glucose transporter	<a href="http://identifiers.org/go/GO:0005355">http://identifiers.org/go/GO:0005355</a>
11	chemical concentration flow rate	chemical concentration flow rate	<a href="http://identifiers.org/opb/OPB_00593">http://identifiers.org/opb/OPB_00593</a>
12	voltage gated calcium channel complex	voltage gated calcium channel complex	<a href="http://identifiers.org/go/GO:0005891">http://identifiers.org/go/GO:0005891</a>
13	van't Hoff law	van't hoff law	<a href="http://identifiers.org/opb/OPB_01061">http://identifiers.org/opb/OPB_01061</a>
14	left ventricular wall	left ventricular wall	<a href="http://purl.obolibrary.org/obo/FMA_9556">http://purl.obolibrary.org/obo/FMA_9556</a>
15	oxidative phosphorylation	oxidative phosphorylation	<a href="http://identifiers.org/go/GO:0006119">http://identifiers.org/go/GO:0006119</a>
16	Cardiac myocyte	cardiac myocyte	<a href="http://purl.obolibrary.org/obo/FMA_14067">http://purl.obolibrary.org/obo/FMA_14067</a>
17	calcium driven ADP phosphorylation	calcium	<a href="http://identifiers.org/chebi/CHEBI:29108">http://identifiers.org/chebi/CHEBI:29108</a>
		ADP phosphorylation	<a href="http://identifiers.org/go/GO:0006757">http://identifiers.org/go/GO:0006757</a>
18	electrical potential difference across blood cell	electrical potential difference	<a href="http://identifiers.org/opb/OPB_00506">http://identifiers.org/opb/OPB_00506</a>
		blood cell	<a href="http://purl.obolibrary.org/obo/FMA_9670">http://purl.obolibrary.org/obo/FMA_9670</a>
19	mechanisms of SGLT2 inhibitors in lowering cytosolic calcium ion	sglt2 inhibitors	<a href="http://identifiers.org/chebi/CHEBI:73273">http://identifiers.org/chebi/CHEBI:73273</a>
		cytosolic calcium ion transport	<a href="http://identifiers.org/go/GO:0060401">http://identifiers.org/go/GO:0060401</a>
20	transport flux of potassium	flux	<a href="http://identifiers.org/opb/OPB_00593">http://identifiers.org/opb/OPB_00593</a>
		potassium	<a href="http://purl.obolibrary.org/obo/CHEBI_29103">http://purl.obolibrary.org/obo/CHEBI_29103</a>
21	concentration of sodium	concentration	<a href="http://identifiers.org/opb/OPB_00340">http://identifiers.org/opb/OPB_00340</a>
		sodium	<a href="http://purl.obolibrary.org/obo/CHEBI_29101">http://purl.obolibrary.org/obo/CHEBI_29101</a>
22	Nernst reversal potential of sodium	nernst reversal potential	<a href="http://identifiers.org/opb/OPB_01581">http://identifiers.org/opb/OPB_01581</a>
		sodium	<a href="http://purl.obolibrary.org/obo/CHEBI_29101">http://purl.obolibrary.org/obo/CHEBI_29101</a>
23	sodium flux	sodium	<a href="http://purl.obolibrary.org/obo/CHEBI_29101">http://purl.obolibrary.org/obo/CHEBI_29101</a>
		flux	<a href="http://identifiers.org/opb/OPB_00593">http://identifiers.org/opb/OPB_00593</a>
24	potassium concentration	potassium	<a href="http://purl.obolibrary.org/obo/CHEBI_29103">http://purl.obolibrary.org/obo/CHEBI_29103</a>
		concentration	<a href="http://identifiers.org/opb/OPB_00340">http://identifiers.org/opb/OPB_00340</a>
25	luminal antiporter activity	luminal	<a href="http://purl.obolibrary.org/obo/FMA_74550">http://purl.obolibrary.org/obo/FMA_74550</a>
		antiporter activity	<a href="http://identifiers.org/go/GO:0015297">http://identifiers.org/go/GO:0015297</a>
26	electrical flow rate incorporating calcium efflux ATPase	electrical flow rate	<a href="http://identifiers.org/opb/OPB_00318">http://identifiers.org/opb/OPB_00318</a>

**Supplementary Material**

		calcium efflux ATPase	<a href="http://identifiers.org/go/GO:0005388">http://identifiers.org/go/GO:0005388</a>
27	the mechanisms of calcium channel blocker in ventricular cardiac muscle cell	calcium channel blocker	<a href="http://identifiers.org/chebi/CHEBI:38215">http://identifiers.org/chebi/CHEBI:38215</a>
		ventricular cardiac muscle cell	<a href="https://identifiers.org/cl/CL:2000046">https://identifiers.org/cl/CL:2000046</a>
28	sodium channel in renal intercalated cell	sodium channel	<a href="http://purl.obolibrary.org/obo/GO_0005272">http://purl.obolibrary.org/obo/GO_0005272</a>
		renal intercalated cell	<a href="http://identifiers.org/cl/CL:0005010">http://identifiers.org/cl/CL:0005010</a>
29	calcium ion significance in mitochondria	calcium ion	<a href="http://purl.obolibrary.org/obo/CHEBI_39124">http://purl.obolibrary.org/obo/CHEBI_39124</a>
		mitochondria	<a href="http://identifiers.org/go/GO:0005739">http://identifiers.org/go/GO:0005739</a>
30	the regulation of mitochondria Na+/Ca2+ antiporter across plasma membrane	the regulation of mitochondria	<a href="http://identifiers.org/go/GO:0005432">http://identifiers.org/go/GO:0005432</a>
		Na+/Ca2+ antiporter	
		plasma membrane	<a href="http://purl.obolibrary.org/obo/FMA_63841">http://purl.obolibrary.org/obo/FMA_63841</a>
31	membrane hyperpolarization removes calcium channel blocker	membrane hyperpolarization	<a href="http://identifiers.org/go/GO:0060081">http://identifiers.org/go/GO:0060081</a>
		calcium channel blocker	<a href="http://identifiers.org/chebi/CHEBI:38215">http://identifiers.org/chebi/CHEBI:38215</a>
32	portion of cytosol in epithelial cell of distal tubule via sodium/hydrogen exchanger 3 (human)	portion of cytosol	<a href="http://purl.obolibrary.org/obo/FMA_66836">http://purl.obolibrary.org/obo/FMA_66836</a>
		epithelial cell of distal tubule	<a href="http://purl.obolibrary.org/obo/FMA_70981">http://purl.obolibrary.org/obo/FMA_70981</a>
		sodium/hydrogen exchanger 3 (human)	<a href="http://purl.obolibrary.org/obo/PR_P48764">http://purl.obolibrary.org/obo/PR_P48764</a>
33	glucose transporter from a kidney that counts for diabetes	glucose transporter	<a href="http://identifiers.org/go/GO:0005355">http://identifiers.org/go/GO:0005355</a>
		kidney	<a href="http://purl.obolibrary.org/obo/FMA_7203">http://purl.obolibrary.org/obo/FMA_7203</a>
		diabetes	<a href="http://identifiers.org/chebi/CHEBI:5931">http://identifiers.org/chebi/CHEBI:5931</a>
34	Flux of sodium through basolateral plasma membrane	flux	<a href="http://identifiers.org/opb/OPB_00593">http://identifiers.org/opb/OPB_00593</a>
		sodium	<a href="http://purl.obolibrary.org/obo/CHEBI_29101">http://purl.obolibrary.org/obo/CHEBI_29101</a>
		basolateral plasma membrane	<a href="http://purl.obolibrary.org/obo/FMA_84669">http://purl.obolibrary.org/obo/FMA_84669</a>
35	The sodium flow across the apical plasma membrane	sodium	<a href="http://purl.obolibrary.org/obo/CHEBI_29101">http://purl.obolibrary.org/obo/CHEBI_29101</a>
		flow	<a href="http://identifiers.org/opb/OPB_00593">http://identifiers.org/opb/OPB_00593</a>
		apical plasma membrane	<a href="http://purl.obolibrary.org/obo/FMA_84666">http://purl.obolibrary.org/obo/FMA_84666</a>
36	The exchange of chloride with bicarbonate across plasma membrane	chloride	<a href="http://purl.obolibrary.org/obo/CHEBI_17996">http://purl.obolibrary.org/obo/CHEBI_17996</a>
		bicarbonate	<a href="http://purl.obolibrary.org/obo/CHEBI_17544">http://purl.obolibrary.org/obo/CHEBI_17544</a>
		plasma membrane	<a href="http://purl.obolibrary.org/obo/FMA_63841">http://purl.obolibrary.org/obo/FMA_63841</a>
37	concentration of hydron in epithelial cell of proximal tubule compartment	concentration	<a href="http://identifiers.org/opb/OPB_00340">http://identifiers.org/opb/OPB_00340</a>
		hydron	<a href="http://purl.obolibrary.org/obo/CHEBI_15378">http://purl.obolibrary.org/obo/CHEBI_15378</a>
		epithelial cell of proximal tubule compartment	<a href="http://purl.obolibrary.org/obo/FMA_70973">http://purl.obolibrary.org/obo/FMA_70973</a>
38	NBCe1 transports H+ and HCO3-	NBCe1	<a href="http://purl.obolibrary.org/obo/PR_000015160">http://purl.obolibrary.org/obo/PR_000015160</a>
		H+	<a href="http://purl.obolibrary.org/obo/CHEBI_15378">http://purl.obolibrary.org/obo/CHEBI_15378</a>
		HCO3-	<a href="http://purl.obolibrary.org/obo/CHEBI_17544">http://purl.obolibrary.org/obo/CHEBI_17544</a>
39	the reverse mode of SGLT1 applies with of a-methyl-alpha-D-glucopyranoside in apical plasma membrane	SGLT1	<a href="http://purl.obolibrary.org/obo/PR_000015165">http://purl.obolibrary.org/obo/PR_000015165</a>
		a-methyl-alpha-D-glucopyranoside	<a href="http://identifiers.org/chebi/CHEBI:320061">http://identifiers.org/chebi/CHEBI:320061</a>
		tissue fluid	<a href="http://purl.obolibrary.org/obo/FMA_84666">http://purl.obolibrary.org/obo/FMA_84666</a>
40	Na/H exchanger 3 rat and anion exchanger 1 rat in the distal convoluted tubule	Na/H exchanger 3	<a href="http://purl.obolibrary.org/obo/PR_P26433">http://purl.obolibrary.org/obo/PR_P26433</a>
		anion exchanger	<a href="http://purl.obolibrary.org/obo/PR_P23562">http://purl.obolibrary.org/obo/PR_P23562</a>
		distal convoluted tubule	<a href="http://identifiers.org/fma/FMA:17721">http://identifiers.org/fma/FMA:17721</a>
41	calcium channel complex and ryanodine receptor in cardiac myocite	calcium channel complex	<a href="http://identifiers.org/go/GO:0034704">http://identifiers.org/go/GO:0034704</a>
		ryanodine receptor	<a href="http://identifiers.org/fma/FMA:62492">http://identifiers.org/fma/FMA:62492</a>
		cardiac myocite	<a href="http://purl.obolibrary.org/obo/FMA_14067">http://purl.obolibrary.org/obo/FMA_14067</a>
42	Flow rate of Calcium across sarcoplasmic reticulum membrane	flow rate	<a href="http://identifiers.org/opb/OPB_00593">http://identifiers.org/opb/OPB_00593</a>
		calcium	<a href="http://purl.obolibrary.org/obo/CHEBI_39124">http://purl.obolibrary.org/obo/CHEBI_39124</a>

		sarcoplasmic membrane	reticulum	<a href="http://identifiers.org/go/GO:0033017">http://identifiers.org/go/GO:0033017</a>
43	RyR2 (human) and IP3 related to sarcoplasmic reticulum calcium (human)	RyR2 (human)		<a href="http://purl.obolibrary.org/obo/PR_Q92736">http://purl.obolibrary.org/obo/PR_Q92736</a>
		IP3		<a href="http://purl.obolibrary.org/obo/CHEBI_16595">http://purl.obolibrary.org/obo/CHEBI_16595</a>
		sarcoplasmic reticulum calcium (human)		<a href="http://purl.obolibrary.org/obo/PR_P16615">http://purl.obolibrary.org/obo/PR_P16615</a>
44	All entities containing Mitochondrial Tricarboxylic Acid Cycle, Oxidative Phosphorylation, and isocitrate dehydrogenase complex	Mitochondrial acid cycle	tricarboxylic	<a href="http://identifiers.org/go/GO:0030062">http://identifiers.org/go/GO:0030062</a>
		isocitrate dehydrogenase	oxidative phosphorylation	<a href="http://identifiers.org/go/GO:0006119">http://identifiers.org/go/GO:0006119</a>
		complex		<a href="http://identifiers.org/go/GO:0005962">http://identifiers.org/go/GO:0005962</a>
45	The calcium state incorporating L-type calcium channel and ryanodine receptor (human)	calcium		<a href="http://identifiers.org/chebi/CHEBI:22984">http://identifiers.org/chebi/CHEBI:22984</a>
		L-type calcium channel		<a href="http://identifiers.org/go/GO:0008331">http://identifiers.org/go/GO:0008331</a>
		ryanodine receptor (human)		<a href="http://purl.obolibrary.org/obo/PR_Q92736">http://purl.obolibrary.org/obo/PR_Q92736</a>
46	Concentration of H+ in the tissue fluid	concentration		<a href="http://identifiers.org/opb/OPB_00340">http://identifiers.org/opb/OPB_00340</a>
		H+		<a href="http://purl.obolibrary.org/obo/CHEBI_15378">http://purl.obolibrary.org/obo/CHEBI_15378</a>
		tissue fluid		<a href="http://purl.obolibrary.org/obo/FMA_9673">http://purl.obolibrary.org/obo/FMA_9673</a>
47	flux of sodium across apical plasma membrane of the distal convoluted tubule	flux		<a href="http://identifiers.org/opb/OPB_00593">http://identifiers.org/opb/OPB_00593</a>
		sodium		<a href="http://purl.obolibrary.org/obo/CHEBI_29101">http://purl.obolibrary.org/obo/CHEBI_29101</a>
		apical plasma membrane		<a href="http://purl.obolibrary.org/obo/FMA_84666">http://purl.obolibrary.org/obo/FMA_84666</a>
		distal convoluted tubule		<a href="http://purl.obolibrary.org/obo/FMA_17721">http://purl.obolibrary.org/obo/FMA_17721</a>
48	flux of sodium across apical plasma membrane of the proximal convoluted tubule	flux		<a href="http://identifiers.org/opb/OPB_00593">http://identifiers.org/opb/OPB_00593</a>
		sodium		<a href="http://purl.obolibrary.org/obo/CHEBI_29101">http://purl.obolibrary.org/obo/CHEBI_29101</a>
		apical plasma membrane		<a href="http://purl.obolibrary.org/obo/FMA_84666">http://purl.obolibrary.org/obo/FMA_84666</a>
		proximal convoluted tubule		<a href="http://purl.obolibrary.org/obo/FMA_17693">http://purl.obolibrary.org/obo/FMA_17693</a>
49	flux of IP3 receptor through P2Y2 purinoceptor and apical plasma membrane	flux		<a href="http://identifiers.org/opb/OPB_00593">http://identifiers.org/opb/OPB_00593</a>
		ip3 receptor		<a href="http://purl.obolibrary.org/obo/CHEBI_131186">http://purl.obolibrary.org/obo/CHEBI_131186</a>
		p2y2 purinoceptor		<a href="http://purl.obolibrary.org/obo/PR_P35383">http://purl.obolibrary.org/obo/PR_P35383</a>
		apical plasma membrane		<a href="http://purl.obolibrary.org/obo/FMA_84666">http://purl.obolibrary.org/obo/FMA_84666</a>
50	concentration of sodium in the portion of cytosol in epithelial cell of distal tubule	concentration		<a href="http://identifiers.org/opb/OPB_00340">http://identifiers.org/opb/OPB_00340</a>
		sodium		<a href="http://purl.obolibrary.org/obo/CHEBI_29101">http://purl.obolibrary.org/obo/CHEBI_29101</a>
		portion of cytosol		<a href="http://purl.obolibrary.org/obo/FMA_66836">http://purl.obolibrary.org/obo/FMA_66836</a>
		epithelial cell of distal tubule		<a href="http://purl.obolibrary.org/obo/FMA_70981">http://purl.obolibrary.org/obo/FMA_70981</a>
51	sodium concentration in tissue fluid in epithelial cell of distal tubule	sodium		<a href="http://purl.obolibrary.org/obo/CHEBI_29101">http://purl.obolibrary.org/obo/CHEBI_29101</a>
		concentration		<a href="http://identifiers.org/opb/OPB_00340">http://identifiers.org/opb/OPB_00340</a>
		tissue fluid		<a href="http://purl.obolibrary.org/obo/FMA_9673">http://purl.obolibrary.org/obo/FMA_9673</a>
		epithelial cell of distal tubule		<a href="http://purl.obolibrary.org/obo/FMA_70981">http://purl.obolibrary.org/obo/FMA_70981</a>
52	K+ flow through potassium channel complex across apical cell membrane	K+		<a href="http://identifiers.org/chebi/CHEBI:29103">http://identifiers.org/chebi/CHEBI:29103</a>
		flow		<a href="http://identifiers.org/opb/OPB_00593">http://identifiers.org/opb/OPB_00593</a>
		potassium channel complex		<a href="http://identifiers.org/go/GO:0034705">http://identifiers.org/go/GO:0034705</a>
		apical cell membrane		<a href="http://purl.obolibrary.org/obo/FMA_84666">http://purl.obolibrary.org/obo/FMA_84666</a>

**Table S2:** Historical query and result models in the PMR

#	Query	Model
1	electrical potential difference human	<a href="http://hodgkin.huxley.1952/rawfile/HEAD/hodgkin.huxley_1952.cellml">hodgkin.huxley.1952/rawfile/HEAD/hodgkin.huxley_1952.cellml</a> <a href="http://hodgkin.huxley.1952/rawfile/HEAD/hodgkin.huxley_1952.variant01.cellml">hodgkin.huxley.1952/rawfile/HEAD/hodgkin.huxley_1952.variant01.cellml</a>
		<a href="http://baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml">baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml</a>

		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
3	heart tissue	tentusscher_noble_noble_panfilov_2004/rawfile/HEAD/tentusscher_noble_noble_panfilov_2004.c.cellml tentusscher_noble_noble_panfilov_2004/rawfile/HEAD/tentusscher_noble_noble_panfilov_2004.b.cellml tentusscher_noble_noble_panfilov_2004/rawfile/HEAD/tentusscher_noble_noble_panfilov_2004.a.cellml
4	calmodulin	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
5	a synthetic oscillatory network of transcriptional	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
6	heart	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
7	ion	michailova_mcculloch_2001/rawfile/HEAD/michailova_mcculloch_2001.cellml jafri_rice_winslow_1998/rawfile/HEAD/jafri_rice_winslow_1998.a.cellml winslow_rice_jafri_marban_ororke_1999/rawfile/HEAD/winslow_rice_jafri_marban_ororke_1999.cellml jafri_rice_winslow_1998/rawfile/HEAD/jafri_rice_winslow_1998.b.cellml
8	minimal haemodynamic system model including ventricular interaction and valve dynamics	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml

		boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
9	diffusion	keener_2001/rawfile/HEAD/keener_2001.cellml
10	calmodulin mediates differential sensitivity of camkii and calcineurin to local	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
11	a mathematical treatment of integrated ca dynamics within the ventricular myocyte	shannon_wang_puglisi_weber bers_2004/rawfile/HEAD/shannon_wang_puglisi_weber bers_2004.a.cellml shannon_wang_puglisi_weber bers_2004/rawfile/HEAD/shannon_wang_puglisi_weber bers_2004.b.cellml
12	human atrial	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
13	thomas r. shannon	shannon_wang_puglisi_weber bers_2004/rawfile/HEAD/shannon_wang_puglisi_weber bers_2004.b.cellml shannon_wang_puglisi_weber bers_2004/rawfile/HEAD/shannon_wang_puglisi_weber bers_2004.a.cellml
14	atrial fibrillation	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
15	nhe3	267/rawfile/HEAD/weinstein_1995-rabbit.cellml 267/rawfile/HEAD/SEDML/weinstein_1995/weinstein_1995.cellml 267/rawfile/HEAD/weinstein_1995-mouse.cellml 267/rawfile/HEAD/weinstein_1995.cellml
16	caffeine concentration model	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml

		boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
17	gap junctions	bindschadler_sneyd_2001/rawfile/HEAD/bindschadler_sneyd_2001.cellml 267/rawfile/HEAD/bindschadler_sneyd_2001.cellml
18	gap junction	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
19	a novel computational model of the human ventricular action potential and ca transient	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
20	a model for human ventricular tissue	tentusscher_noble_noble_panfilov_2004/rawfile/HEAD/tentusscher_noble_noble_panfilov_2004.c.cellml tentusscher_noble_noble_panfilov_2004/rawfile/HEAD/tentusscher_noble_noble_panfilov_2004.b.cellml tentusscher_noble_noble_panfilov_2004/rawfile/HEAD/tentusscher_noble_noble_panfilov_2004.a.cellml
21	a model of the ventricular cardiac action potential: depolarization, repolarization, and their interaction	luo_rudy_1991/rawfile/HEAD/luo_rudy_1991.cellml
22	cardiomyocyte	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
23	a mathematical model of plasma membrane electrophysiology and calcium dynamics in vascular endothelial cells python model	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml

		devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
24	cell cycle	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar_1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar_1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
25	using physiome standards to couple cellular functions for rat cardiac excitation-contraction	terkildsen.niederer.crampin.hunter.smith_2008/rawfile/HEAD/Pandit.Hinch.Niederer.cellml
26	rat gattoni	terkildsen.niederer.crampin.hunter.smith_2008/rawfile/HEAD/Pandit.Hinch.Niederer.cellml
27	action potential	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml luo.rudy_1991/rawfile/HEAD/luo.rudy_1991.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar_1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar_1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
28	human fibroblast	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar_1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar_1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
29	minimal hemodynamics heart	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar_1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar_1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
30	di francesco-noble	difrancesco.noble_1985/rawfile/HEAD/difrancesco.noble_1985.cellml
31	smith, crampin	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml

		yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
32	modeling the effects of caffeine on blood pressure	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
33	cardiac*	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
34	insulin	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml gall_susa_1999/rawfile/HEAD/gall_susa_1999_b.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml gall_susa_1999/rawfile/HEAD/gall_susa_1999_c.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml chay_1997/rawfile/HEAD/chay_1997.cellml 570/rawfile/HEAD/bertram_satin_pedersen_luciani_sherman_2007.cellml keener_2001/rawfile/HEAD/keener_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml magnus_keizer_1998/rawfile/HEAD/magnus_keizer_1998.cellml goforth_bertram_khan_zhang_sherman_satin_2002/rawfile/HEAD/goforth_bertram_khan_zhang_sherman_satin_2002.cellml gall_susa_1999/rawfile/HEAD/gall_susa_1999_a.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
35	beta cell	bertram_previte_sherman_kinard_satin_2000/rawfile/HEAD/bertram_previte_sherman_kinard_satin_2000_medium.cellml bertram_previte_sherman_kinard_satin_2000/rawfile/HEAD/bertram_previte_sherman_kinard_satin_2000_fast.cellml bertram_previte_sherman_kinard_satin_2000/rawfile/HEAD/bertram_previte_sherman_kinard_satin_2000_slow.cellml
36	camkii	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml

		boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
37	frog intact muscle	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.f.cellml
38	christopher data-driven computer	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
39	brain model	546/rawfile/HEAD/cloutier_2009.cellml
40	socrates dokos, branko celler, and nigel lovell	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
41	rabbit	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
42	kidney	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml 267/rawfile/HEAD/mackenzie_1996-mouse-baso.cellml 267/rawfile/HEAD/SEDML/mackenzie_1996-mackenzie_1996.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml 267/rawfile/HEAD/mackenzie_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml

		baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar_1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar_1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
44	sodium channel	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar_1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar_1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
45	mitochondrial modulation of intracellular	fall_keizer_2001/rawfile/HEAD/fall_keizer_2001.cellml
46	a simplified model for mitochondrial atp production	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar_1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar_1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
47	an integrated model of cardiac mitochondrial energy metabolism and calcium dynamics	cortassa.aon.marban.winslow.orourke_2003/rawfile/HEAD/cortassa.aon.marban.winslow.orourke_2003.cellml
48	complex calcium oscillations and the role of mitochondria and cytosolic proteins	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar_1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar_1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
49	a mitochondrial oscillator dependent on reactive oxygen species	cortassa.aon.marban.winslow.orourke_2003/rawfile/HEAD/cortassa.aon.marban.winslow.orourke_2003.cellml
50	computer modeling of mitochondrial tricarboxylic acid cycle, oxidative phosphorylation, metabolite transport, and electrophysiology	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml

		izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml
		stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml
		devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml
		marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml
		luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml
		colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml
		cortassa_aon_marban_winslow_orourke_2003/rawfile/HEAD/cortassa_aon_marban_winslow_orourke_2003.cellml
		dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml
		yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml
51	mitochondria	boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml
		fall_keizer_2001/rawfile/HEAD/fall_keizer_2001.cellml
		iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml
		546/rawfile/HEAD/cloutier_2009.cellml
		albrecht_colegrove_friel_2002/rawfile/HEAD/albrecht_colegrove_friel_2002.cellml
		izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml
		stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml
		devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml
		marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml
		luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml
		colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml
		dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml
52	t cell receptors	yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml
		boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml
		iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml
		izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml
		stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml
		devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml
		marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml
		luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml
		colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml
		dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml
53	respiratory	yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml
		boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml
		iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml
		izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml
		stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml
		devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml
		marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml
		luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml
		colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml
		dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml
54	atrial ap	yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml
		boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml
		iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml
		izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml
		stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml
		devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml
		marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml
		luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml
		colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml

		cortassa_aon_marban_winslow_orourke_2003/rawfile/HEAD/cortassa_aon_marban_winslow_orourke_2003.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml noble_noble_2001/rawfile/HEAD/noble_noble_2001.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml shannon_wang_puglisi_weber_bers_2004/rawfile/HEAD/shannon_wang_puglisi_weber_bers_2004_a.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham.yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham.yang_boheler_rios_1999.cellml shiferaw_watanabe_garfinkel_weiss_karma_2003/rawfile/HEAD/shiferaw_watanabe_garfinkel_weiss_karma_2003.cellml shannon_wang_puglisi_weber_bers_2004/rawfile/HEAD/shannon_wang_puglisi_weber_bers_2004_b.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
56	luo rudy phase -ii model	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002_b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002_d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham.yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham.yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
57	magnus, keizer	fall_keizer_2001/rawfile/HEAD/fall_keizer_2001.cellml
58	purkinje cell model	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002_b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002_d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham.yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham.yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
59	human atrial cell model	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002_b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002_d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham.yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham.yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
60	purkinje fibre human	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002_b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002_d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham.yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham.yang_boheler_rios_1999.cellml

		devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
61	human purkinje	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar_1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar_1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
62	matlab calcium	faber.rudy_2000/rawfile/HEAD/faber.rudy.modified.version_2000.cellml
63	an integrative dynamic model of brain energy metabolism using in vivo neurochemical measurements	546/rawfile/HEAD/cloutier_2009.cellml
64	ryanodine	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml mikhailova.mcculloch_2001/rawfile/HEAD/mikhailova.mcculloch_2001.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml jafri.rice.winslow_1998/rawfile/HEAD/jafri.rice.winslow_1998.a.cellml jafri.rice.winslow_1998/rawfile/HEAD/jafri.rice.winslow_1998.b.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml winslow.rice.jafri.marban.ororke_1999/rawfile/HEAD/winslow.rice.jafri.marban.ororke_1999.cellml izakov.katsnelson.blyakhman.markhasin.shkylar_1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar_1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
65	magnus, keizer, 1998	magnus.keizer_1998/rawfile/HEAD/magnus.keizer_1998.cellml fall.keizer_2001/rawfile/HEAD/fall.keizer_2001.cellml
66	brain	546/rawfile/HEAD/cloutier_2009.cellml
67	noble'98	noble.noble_2001/rawfile/HEAD/noble.noble_2001.cellml
68	nuclear erythroid 2	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar_1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar_1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
69	cytosolic inhibitor	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml 267/rawfile/HEAD/eskandari_2005.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml 267/rawfile/HEAD/SEDML/eskandari_2005/eskandari_2005.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml

		izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml
		stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml
		devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml
		marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml
		luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml
		colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml
		dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml
		yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml
		boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml
		iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml
		izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml
		stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml
		devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml
		marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
70	lumped-parameter cardiovascular	267/rawfile/HEAD/mackenzie_1996-mouse-baso.cellml
70	lumped-parameter cardiovascular	267/rawfile/HEAD/SEDML/mackenzie_1996/mackenzie_1996.cellml
70	lumped-parameter cardiovascular	267/rawfile/HEAD/mackenzie_1996.cellml
		bertram_satin_zhang_smolen_sherman_2004/rawfile/HEAD/bertram_satin_zhang_smolen_sherman_2004.b.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml
		luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml
		colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml
		dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml
		yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml
		boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml
		267/rawfile/HEAD/bindschadler_sneyd_2001.cellml
		iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml
		magnus_keizer_1998/rawfile/HEAD/magnus_keizer_1998.cellml
		bertram_satin_zhang_smolen_sherman_2004/rawfile/HEAD/bertram_satin_zhang_smolen_sherman_2004.a.cellml
		izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml
		stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml
		bindschadler_sneyd_2001/rawfile/HEAD/bindschadler_sneyd_2001.cellml
		devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml
		marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
72	calcium cerebral palsy	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml
72	calcium cerebral palsy	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml
72	calcium cerebral palsy	luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml
72	calcium cerebral palsy	colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml
72	calcium cerebral palsy	dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml
72	calcium cerebral palsy	yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml
72	calcium cerebral palsy	boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml
72	calcium cerebral palsy	267/rawfile/HEAD/bindschadler_sneyd_2001.cellml
72	calcium cerebral palsy	iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml
72	calcium cerebral palsy	izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml
72	calcium cerebral palsy	stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml
72	calcium cerebral palsy	shiferaw_watanabe_garfinkel_weiss_karma_2003/rawfile/HEAD/shiferaw_watanabe_garfinkel_weiss_karma_2003.cellml
72	calcium cerebral palsy	devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml
72	calcium cerebral palsy	marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
73	ventricular	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml
73	ventricular	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml
73	ventricular	luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml
73	ventricular	colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml
73	ventricular	dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml
73	ventricular	yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml
73	ventricular	boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml
73	ventricular	iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml
73	ventricular	izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml
73	ventricular	stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml
73	ventricular	shiferaw_watanabe_garfinkel_weiss_karma_2003/rawfile/HEAD/shiferaw_watanabe_garfinkel_weiss_karma_2003.cellml
73	ventricular	devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml
73	ventricular	marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
74	calcium heart	michailova_mcculloch_2001/rawfile/HEAD/michailova_mcculloch_2001.cellml
74	calcium heart	jafri_rice_winslow_1998/rawfile/HEAD/jafri_rice_winslow_1998.a.cellml
74	calcium heart	winslow_rice_jafri_marban_ororke_1999/rawfile/HEAD/winslow_rice_jafri_marban_ororke_1999.cellml
74	calcium heart	jafri_rice_winslow_1998/rawfile/HEAD/jafri_rice_winslow_1998.b.cellml
75	noble ventricle 2000	tentusscher_noble_noble_panfilov_2004/rawfile/HEAD/tentusscher_noble_noble_panfilov_2004.c.cellml
75	noble ventricle 2000	tentusscher_noble_noble_panfilov_2004/rawfile/HEAD/tentusscher_noble_noble_panfilov_2004.b.cellml
75	noble ventricle 2000	tentusscher_noble_noble_panfilov_2004/rawfile/HEAD/tentusscher_noble_noble_panfilov_2004.a.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml
		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml
		luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml

		colegrove.albrecht.friel.2000/rawfile/HEAD/colegrove.albrecht.friel.2000.cellml dougherty.wright.yew.2005/rawfile/HEAD/dougherty.wright.yew.2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga.1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga.1996.cellml boyett.zhang.garny.holden.2001/rawfile/HEAD/boyett.zhang.garny.holden.2001.cellml iriбе.kohl.noble.2006/rawfile/HEAD/iriбе.kohl.noble.2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar.1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar.1991.cellml stern.song.sham.yang.boheler.rios.1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios.1999.cellml devries.sherman.2000/rawfile/HEAD/devries.sherman.2000.cellml marhl.haberichter.brumen.heinrich.2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich.2000.cellml
77	mapk	baylor.hollingworth.chandler.2002/rawfile/HEAD/baylor.hollingworth.chandler.2002.b.cellml baylor.hollingworth.chandler.2002/rawfile/HEAD/baylor.hollingworth.chandler.2002.d.cellml luo.rudy.1994/rawfile/HEAD/luo.rudy.1994.cellml colegrove.albrecht.friel.2000/rawfile/HEAD/colegrove.albrecht.friel.2000.cellml dougherty.wright.yew.2005/rawfile/HEAD/dougherty.wright.yew.2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga.1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga.1996.cellml boyett.zhang.garny.holden.2001/rawfile/HEAD/boyett.zhang.garny.holden.2001.cellml iriбе.kohl.noble.2006/rawfile/HEAD/iriбе.kohl.noble.2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar.1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar.1991.cellml stern.song.sham.yang.boheler.rios.1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios.1999.cellml devries.sherman.2000/rawfile/HEAD/devries.sherman.2000.cellml marhl.haberichter.brumen.heinrich.2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich.2000.cellml
78	electrolytes disturbance with complete heart block	baylor.hollingworth.chandler.2002/rawfile/HEAD/baylor.hollingworth.chandler.2002.b.cellml baylor.hollingworth.chandler.2002/rawfile/HEAD/baylor.hollingworth.chandler.2002.d.cellml luo.rudy.1994/rawfile/HEAD/luo.rudy.1994.cellml colegrove.albrecht.friel.2000/rawfile/HEAD/colegrove.albrecht.friel.2000.cellml dougherty.wright.yew.2005/rawfile/HEAD/dougherty.wright.yew.2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga.1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga.1996.cellml boyett.zhang.garny.holden.2001/rawfile/HEAD/boyett.zhang.garny.holden.2001.cellml iriбе.kohl.noble.2006/rawfile/HEAD/iriбе.kohl.noble.2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar.1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar.1991.cellml stern.song.sham.yang.boheler.rios.1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios.1999.cellml devries.sherman.2000/rawfile/HEAD/devries.sherman.2000.cellml marhl.haberichter.brumen.heinrich.2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich.2000.cellml
79	mitochondrial	fall_keizer.2001/rawfile/HEAD/fall_keizer.2001.cellml
80	atp	baylor.hollingworth.chandler.2002/rawfile/HEAD/baylor.hollingworth.chandler.2002.b.cellml baylor.hollingworth.chandler.2002/rawfile/HEAD/baylor.hollingworth.chandler.2002.d.cellml luo.rudy.1994/rawfile/HEAD/luo.rudy.1994.cellml colegrove.albrecht.friel.2000/rawfile/HEAD/colegrove.albrecht.friel.2000.cellml dougherty.wright.yew.2005/rawfile/HEAD/dougherty.wright.yew.2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga.1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga.1996.cellml boyett.zhang.garny.holden.2001/rawfile/HEAD/boyett.zhang.garny.holden.2001.cellml iriбе.kohl.noble.2006/rawfile/HEAD/iriбе.kohl.noble.2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar.1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar.1991.cellml stern.song.sham.yang.boheler.rios.1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios.1999.cellml devries.sherman.2000/rawfile/HEAD/devries.sherman.2000.cellml marhl.haberichter.brumen.heinrich.2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich.2000.cellml
81	luo-rudy model	difrancesco.noble.1985/rawfile/HEAD/difrancesco.noble.1985.cellml
82	cancer metabolism	baylor.hollingworth.chandler.2002/rawfile/HEAD/baylor.hollingworth.chandler.2002.b.cellml baylor.hollingworth.chandler.2002/rawfile/HEAD/baylor.hollingworth.chandler.2002.d.cellml luo.rudy.1994/rawfile/HEAD/luo.rudy.1994.cellml colegrove.albrecht.friel.2000/rawfile/HEAD/colegrove.albrecht.friel.2000.cellml dougherty.wright.yew.2005/rawfile/HEAD/dougherty.wright.yew.2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga.1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga.1996.cellml boyett.zhang.garny.holden.2001/rawfile/HEAD/boyett.zhang.garny.holden.2001.cellml iriбе.kohl.noble.2006/rawfile/HEAD/iriбе.kohl.noble.2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar.1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar.1991.cellml stern.song.sham.yang.boheler.rios.1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios.1999.cellml devries.sherman.2000/rawfile/HEAD/devries.sherman.2000.cellml marhl.haberichter.brumen.heinrich.2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich.2000.cellml baylor.hollingworth.chandler.2002/rawfile/HEAD/baylor.hollingworth.chandler.2002.b.cellml

		baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar.1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar.1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
84	interaction of glycolysis and mitochondrial respiration in metabolic oscillations of pancreatic islets	570/rawfile/HEAD/bertram.satin.pedersen.luciani.sherman_2007.cellml
85	luo rudy model	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar.1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar.1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
86	di francesco-noble purkinje fibre model 1985	difrancesco.noble_1985/rawfile/HEAD/difrancesco.noble_1985.cellml
87	computational models of ventricular	iyer.mazhari.winslow_2004/rawfile/HEAD/iyer.mazhari.winslow_2004.cellml
88	cardiac	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar.1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar.1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
89	human ventricular	tentusscher.noble.noble.panfilov_2004/rawfile/HEAD/tentusscher.noble.noble.panfilov_2004.c.cellml tentusscher.noble.noble.panfilov_2004/rawfile/HEAD/tentusscher.noble.noble.panfilov_2004.b.cellml tentusscher.noble.noble.panfilov_2004/rawfile/HEAD/tentusscher.noble.noble.panfilov_2004.a.cellml
90	bueno-orovio-cherry-fenton model	difrancesco.noble_1985/rawfile/HEAD/difrancesco.noble_1985.cellml
91	temperature	baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.b.cellml baylor.hollingworth.chandler_2002/rawfile/HEAD/baylor.hollingworth.chandler_2002.d.cellml luo.rudy_1994/rawfile/HEAD/luo.rudy_1994.cellml colegrove.albrecht.friel_2000/rawfile/HEAD/colegrove.albrecht.friel_2000.cellml dougherty.wright.yew_2005/rawfile/HEAD/dougherty.wright.yew_2005.cellml yamaguchi.takaki.matsubara.yasuhara.suga_1996/rawfile/HEAD/yamaguchi.takaki.matsubara.yasuhara.suga_1996.cellml boyett.zhang.garny.holden_2001/rawfile/HEAD/boyett.zhang.garny.holden_2001.cellml iribe.kohl.noble_2006/rawfile/HEAD/iribe.kohl.noble_2006.cellml izakov.katsnelson.blyakhman.markhasin.shkylar.1991/rawfile/HEAD/izakov.katsnelson.blyakhman.markhasin.shkylar.1991.cellml stern.song.sham.yang.boheler.rios_1999/rawfile/HEAD/stern.song.sham.yang.boheler.rios_1999.cellml devries.sherman_2000/rawfile/HEAD/devries.sherman_2000.cellml marhl.haberichter.brumen.heinrich_2000/rawfile/HEAD/marhl.haberichter.brumen.heinrich_2000.cellml
92	adenosine brain	546/rawfile/HEAD/cloutier_2009.cellml
93	sglt1	267/rawfile/HEAD/SEDML/mackenzie_1996/mackenzie_1996.cellml 267/rawfile/HEAD/mackenzie_1996.cellml 267/rawfile/HEAD/SEDML/eskandari_2005/eskandari_2005.cellml

		267/rawfile/HEAD/eskandari_2005.cellml 267/rawfile/HEAD/mackenzie_1996-mouse-baso.cellml
94	a model of cardiac electrical activity incorporating ionic pumps and concentration changes	difrancesco_noble_1985/rawfile/HEAD/difrancesco_noble_1985.cellml
95	oxidative phosphorylation	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml 546/rawfile/HEAD/cloutier_2009.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
96	rat	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
97	glucose	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml 267/rawfile/HEAD/eskandari_2005.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml 267/rawfile/HEAD/SEDML/eskandari_2005/eskandari_2005.cellml 570/rawfile/HEAD/bertram_satin_pedersen_luciani_sherman_2007.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
98	pancreatic alpha cells	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham_yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham_yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
		iyer_mazhari_winslow_2004/rawfile/HEAD/iyer_mazhari_winslow_2004.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml

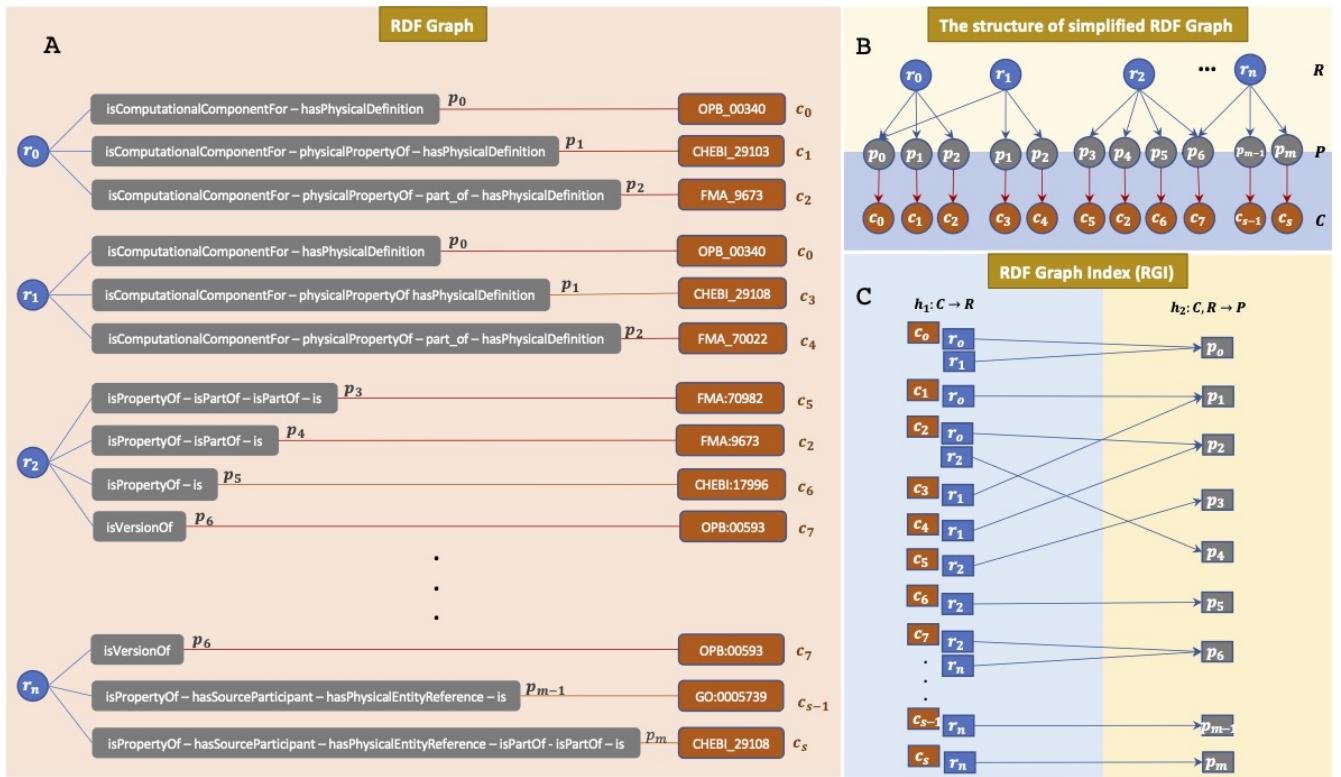
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101	graph	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham.yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham.yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml marhl_haberichter_brumen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brumen_heinrich_2000.cellml
102	mouse ventricular myocyte action potential calcium transients cptv	563/rawfile/HEAD/saucerman_brunton_michailova_mcculloch_2003.cellml
103	growth hormone	baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.b.cellml baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml luo_rudy_1994/rawfile/HEAD/luo_rudy_1994.cellml colegrove_albrecht_friel_2000/rawfile/HEAD/colegrove_albrecht_friel_2000.cellml dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml boyett_zhang_garny_holden_2001/rawfile/HEAD/boyett_zhang_garny_holden_2001.cellml iribe_kohl_noble_2006/rawfile/HEAD/iribe_kohl_noble_2006.cellml izakov_katsnelson_blyakhman_markhasin_shkylar_1991/rawfile/HEAD/izakov_katsnelson_blyakhman_markhasin_shkylar_1991.cellml stern_song_sham.yang_boheler_rios_1999/rawfile/HEAD/stern_song_sham.yang_boheler_rios_1999.cellml devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml

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		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml
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		yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml
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		baylor_hollingworth_chandler_2002/rawfile/HEAD/baylor_hollingworth_chandler_2002.d.cellml
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		dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml
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		dougherty_wright_yew_2005/rawfile/HEAD/dougherty_wright_yew_2005.cellml
110	a model of excitation and adaptation in bacterial chemotaxis	yamaguchi_takaki_matsubara_yasuhara_suga_1996/rawfile/HEAD/yamaguchi_takaki_matsubara_yasuhara_suga_1996.cellml

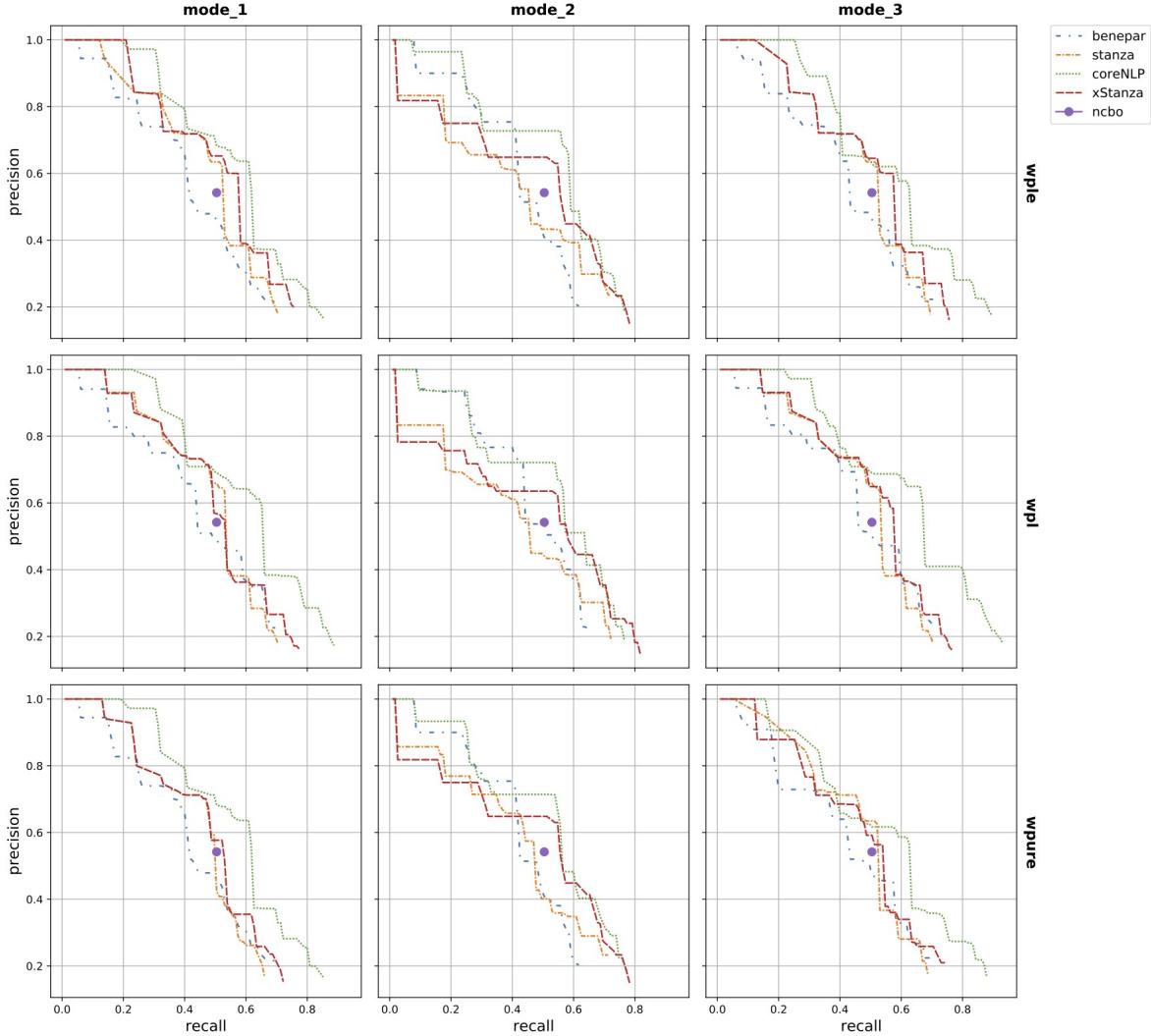
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		devries_sherman_2000/rawfile/HEAD/devries_sherman_2000.cellml
		marhl_haberichter_brunnen_heinrich_2000/rawfile/HEAD/marhl_haberichter_brunnen_heinrich_2000.cellml

**Table S3.** The best multipliers setup and results. We examine three feature modifications, i.e. without modification (WPURE), adding the preferred label to other features (WPL), and adding the preferred label to empty features only (WPLE). We also examine three additional scenarios to calculate the degree of association, i.e. considering all features with dependency level (mode\_1), considering all features without dependency level (mode\_2), and considering one feature only from ontology dictionaries with the highest weight combined with description feature from the model entity and dependency level (mode\_3).

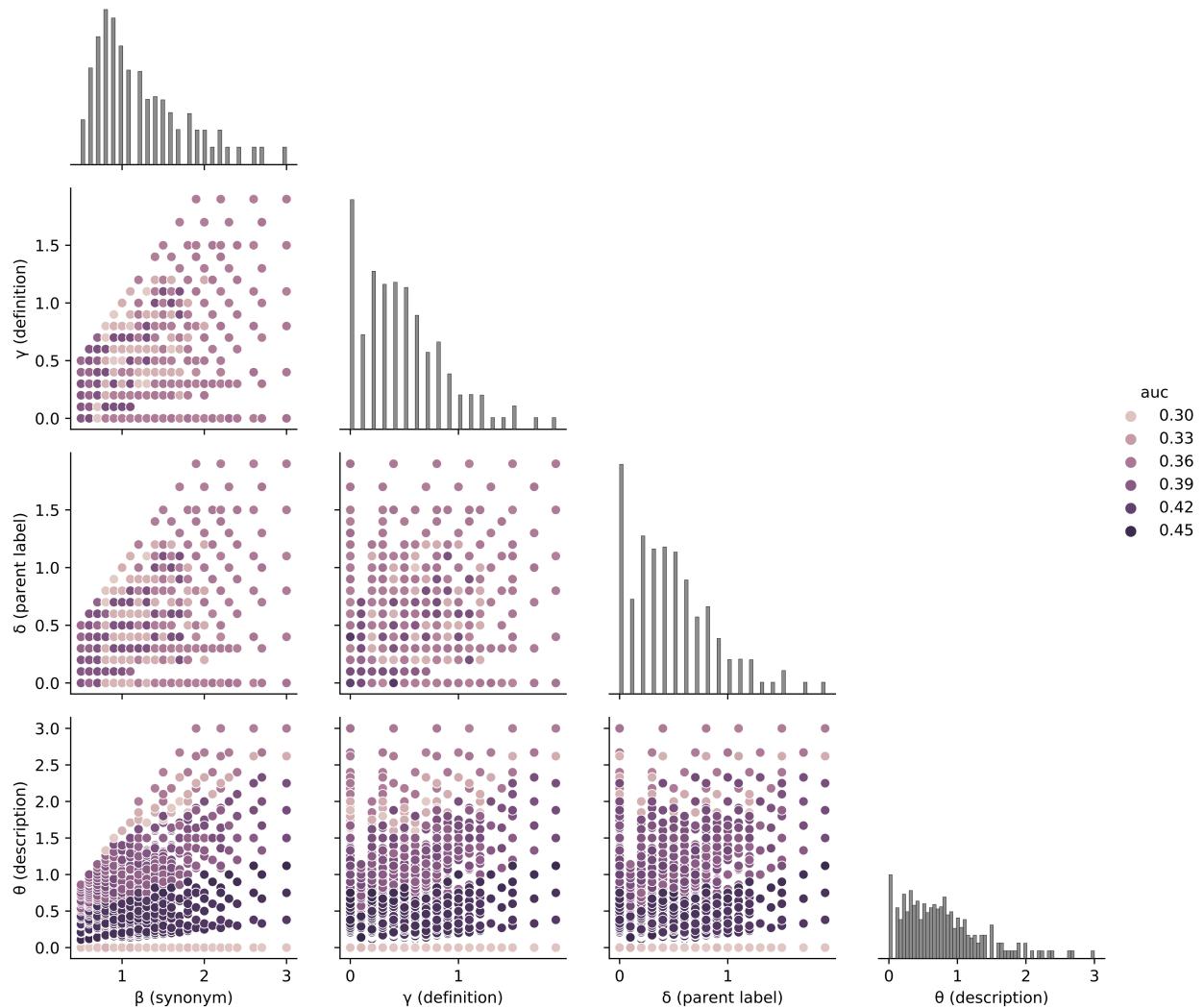
Feature modification	Similarity measure	Parser	( $\alpha$ $\beta$ $\gamma$ $\theta$ $\delta$ )	$AUC_{PR}$
wple	mode_1	benepar	(3.0, 0.0, 0.0, 0.0, 0.81)	0.387
		stanza	(3.0, 0.4, 0.0, 0.0, 0.13)	0.452
		coreNLP	(3.0, 0.0, 0.0, 0.0, 0.16)	0.528
	mode_2	xStanza	(3.0, 0.4, 0.0, 0.0, 0.26)	0.472
		benepar	(3.0, 0.0, 0.0, 0.0, 1.41)	0.344
		stanza	(3.0, 0.7, 0.0, 0.0, 2.67)	0.333
		coreNLP	(3.0, 1.0, 0.3, 0.3, 1.67)	0.405
		xStanza	(3.0, 0.0, 0.0, 0.0, 0.19)	0.371
	mode_3	benepar	(3.0, 0.5, 0.0, 0.1, 0.86)	0.39
		stanza	(3.0, 0.5, 0.0, 0.0, 0.21)	0.454
		coreNLP	(3.0, 0.5, 0.0, 0.0, 0.31)	0.517
wpl	mode_1	xStanza	(3.0, 0.5, 0.0, 0.0, 0.21)	0.474
		benepar	(3.0, 1.1, 0.0, 0.4, 1.12)	0.395
		stanza	(3.0, 0.4, 0.0, 0.2, 0.12)	<b>0.463</b>
	mode_2	coreNLP	(3.0, 0.4, 0.0, 0.2, 0.21)	0.546
		xStanza	(3.0, 0.3, 0.1, 0.2, 0.12)	0.476
		benepar	(3.0, 0.9, 0.0, 0.0, 1.8)	0.362
	mode_3	stanza	(3.0, 0.7, 0.0, 0.0, 2.67)	0.332
		coreNLP	(3.0, 1.0, 0.0, 0.3, 2.0)	0.421
		xStanza	(3.0, 0.1, 0.7, 0.1, 0.29)	0.376
wpure	mode_1	benepar	(3.0, 3.0, 0.0, 0.0, 1.5)	<b>0.408</b>
		stanza	(3.0, 0.5, 0.0, 0.1, 0.11)	<b>0.463</b>
		coreNLP	(3.0, 3.0, 0.0, 0.0, 0.38)	<b>0.553</b>
	mode_2	xStanza	(3.0, 1.0, 0.1, 0.2, 0.12)	<b>0.478</b>
		benepar	(3.0, 0.0, 0.0, 0.0, 0.81)	0.387
		stanza	(3.0, 0.0, 0.0, 0.0, 0.16)	0.441
	mode_3	coreNLP	(3.0, 0.0, 0.0, 0.0, 0.16)	0.528
		xStanza	(3.0, 0.0, 0.0, 0.0, 0.16)	0.457
		benepar	(3.0, 0.0, 0.0, 0.0, 1.41)	0.344



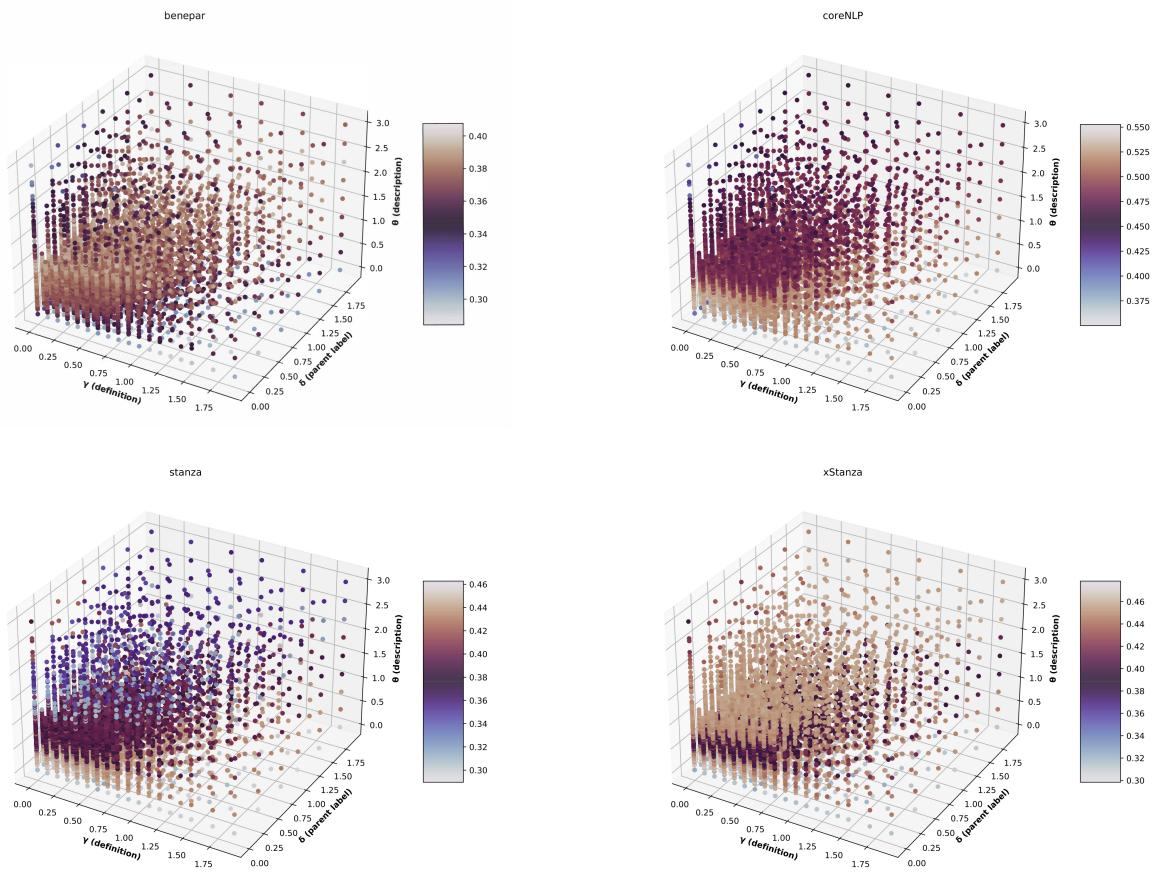
**Figure S1:** The creation of the RDF Graph Index (RGI). (A) The structure of RDF annotation in repositories. There are multiple trees with entities as roots  $R$ , ontology classes  $C$  describing entities  $R$ , and paths  $P$  defining how ontology classes  $C$  describing entities  $R$ . (B) Since a pair of path and ontology class can appear in multiple trees, the structure of the RDF Graph can be simplified by providing a single entry for each pair referenced by multiple roots  $\bar{R}$ . (C) RDF Graph Index (RGI) consisting of indexes mapping ontology classes  $C$  to entities  $R$  and  $(C, R)$  to paths  $P$ .



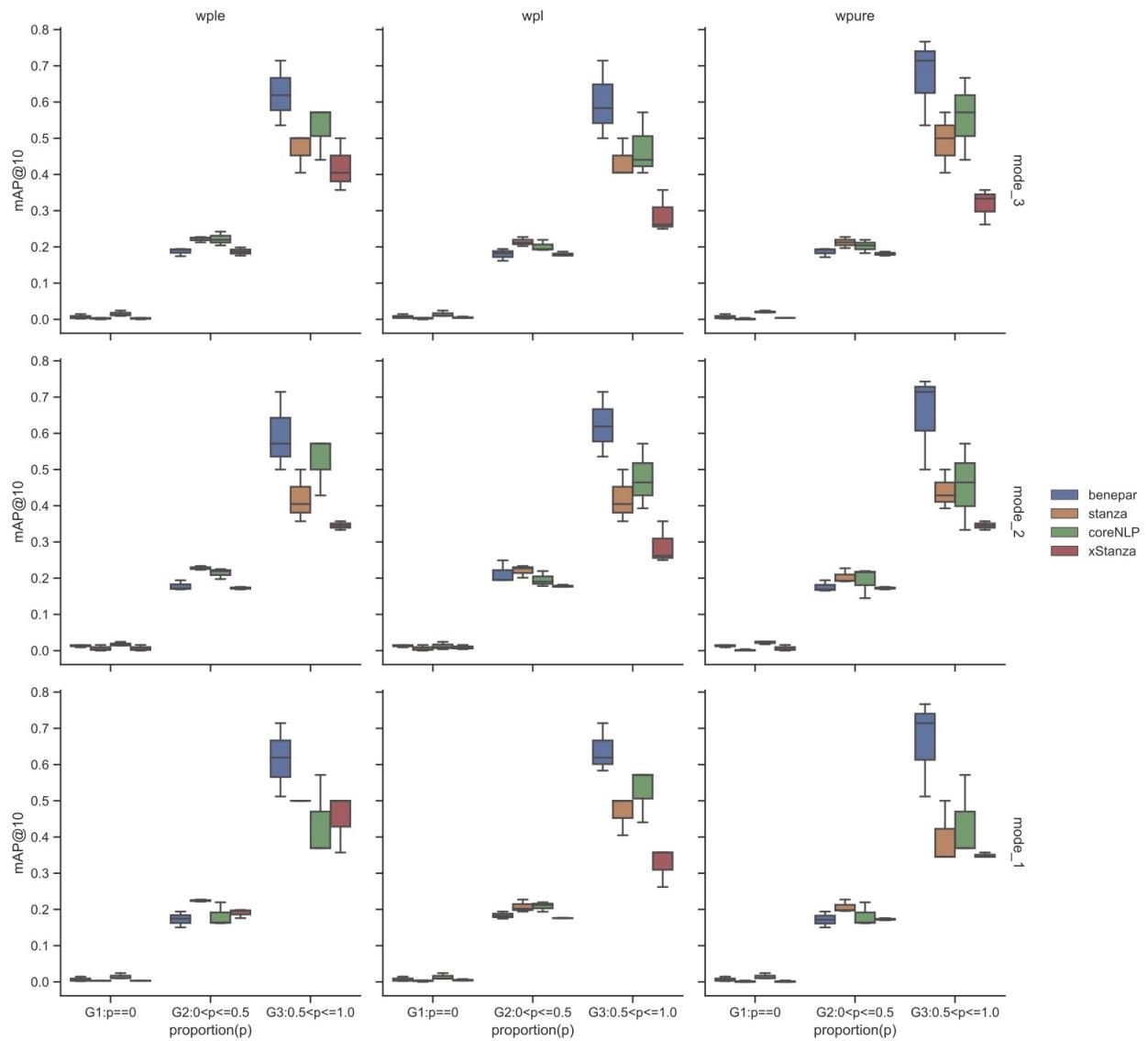
**Figure S2:** The performance of NLIMED to annotate NLQ on a test data containing 52 NLQ. The use of CoreNLP demonstrates the best  $AuC_{PR}$  (Precision-Recall AuC, a single value representing the combination of different precision and recall pairs), followed by xStanza. Compared to NCBO Annotator where its precision and recall is 0.542 and 0.504, respectively, almost all parsers perform better. Interpolated  $AuC_{PR}$  of NLIMED differentiate with four parsers (CoreNLP, Benepar, Stanza, xStanza), three feature modifications (WPURE, WPL, WPLE), and three scenarios to calculate the degree of association (mode\_1, mode\_2, mode\_3).



**Figure S3:** The interaction of features and their role in annotating a query to ontology classes using Stanza, WPL, mode\_3, and  $\alpha=3.0$ . The most important feature is the preferred label followed by the description and synonym, whereas the parent label and definition have the least contributions.



**Figure S4:** The interaction of  $\gamma(\text{definition})$ ,  $\delta(\text{parent label})$ , and  $\theta(\text{description})$  using wpl and mode\_3 along with their  $AuC_{PR}$



**Figure S5:** The mAP@10 of NLIMED on historical query-results records in the PMR differentiate with the highest proportion of terms in one of their ontology classes appear in the query. The multiplier combinations used are the best combination stated at Subsection ?? with additional combinations of  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$ , and  $\theta$  as (3.0, 3.0, 0.5, 0.5, 0.5) and (3.0, 3.0, 1.0, 1.0, 1.0).